

SG79Y421H01
MITSUBISHI ELECTRIC
 SPLIT-TYPE AIR CONDITIONERS
 Models
MSZ-GA22/GA25/GA35VA Series
MUZ-GA25/GA35VA (H)
 [FLARE CONNECTION TYPE]
 When installing an MZX series outdoor unit, refer to the MZX type manual for outdoor unit set up.

1. THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY

- Please provide an exclusive circuit for the air conditioner and do not connect other electrical appliances to it.
 - Be sure to read "THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY" before installing the air conditioner.
 - Be sure to observe the cautions specified here as they include important items related to safety.
 - The indications and meanings are as follows.
- WARNING**
 Could lead to death, serious injury, etc.
- CAUTION**
 Could lead to serious injury in particular environments when operated incorrectly.
- After reading this manual, be sure to keep it together with the OPERATING INSTRUCTIONS in a handy place on the customer's site.
- WARNING**
 Do not install the unit by yourself (customer).
 Incomplete installation could cause injury due to fire, electric shock, the unit falling or leakage of water. Consult the dealer from whom you purchased the unit or special installer.
- Install the unit securely in a place which can bear the weight of the unit.
 When installed in an insufficient strong place, the unit could fall causing injury.
- Use the specified wires to connect the indoor and outdoor units securely and attach the wires firmly to the terminal block connecting sections so the stress of the wires is not applied to the sections.
 Incomplete connecting and fixing could cause fire.
- Do not use intermediate connection of the power cord or the extension cord and do not connect many devices to one AC outlet.
 It could cause a fire or an electric shock due to defective contact, defective insulation, exceeding the permissible current, etc.
- Check that the refrigerant gas do not leak after installation has completed.
 If refrigerant gas leaks indoors, and comes into contact with the fire of a fan heater, space heater, stove, etc., harmful substances will be generated.
- Perform the installation securely referring to the installation manual.
 Incomplete installation could cause a personal injury due to fire, electric shock, the unit falling or leakage of water.
- Perform electrical work according to the installation manual and be sure to use an exclusive circuit.
 If the capacity of the power circuit is insufficient or there is incomplete electrical work, it could result in a fire or an electric shock.
- Attach the electrical cover to the indoor unit and the service panel to the outdoor unit securely.
 If the electrical cover in the indoor unit and/or the service panel in the outdoor unit are not attached securely, it could result in a fire or an electric shock due to dust, water, etc.
- Be sure to use the part provided or specified parts for the installation work.
 The use of defective parts could cause an injury or leakage of water due to a fire, an electric shock, the unit falling, etc.
- Be sure to cut off the main power in case of setting up the indoor electronic control P.C. board or wiring works.
 It could cause an electric shock.
- The appliance shall be installed in accordance with national wiring regulations.
- When installing or relocating the unit, make sure that no substance other than the specified refrigerant (R410A) enters the refrigerant circuit.
 Any presence of foreign substance such as air can cause abnormal pressure rise or an explosion.



3. INSTALLATION DIAGRAM & ACCESSORIES

FLARED CONNECTIONS

| | |
|---|--|
| • This unit has flared connections on both indoor and outdoor sides. | |
| • Remove the outdoor units valve cover, then connect the pipe. | |
| • Refrigerant pipes are used to connect the indoor and outdoor units. | |
| • Be careful not to crush or bend the pipe in bending. | |

| | |
|-------------------|-----------|
| Limits | 20 m max. |
| Pipe length | 12 m max. |
| Height difference | 10 m max. |
| No. of bends | 10 max. |

| | | |
|---|--|-----------------------------------|
| Refrigerant adjustment... If pipe length exceeds 7 m, additional refrigerant (R410A) charge is required. (The outdoor unit is charged with refrigerant for pipe length up to 7 m.) | | |
| Pipe length | Up to 7 m | No additional charge is required. |
| | Exceeding 7 m | Additional charge is required. |
| Refrigerant to be added | 30 g/m × (refrigerant piping length (m) - 5) | |

ACCESSORIES

Check the following parts before installation.

-Indoor unit-

| | |
|--|---|
| 1. Installation plate | 1 |
| 2. Installation plate fixing screw (4 × 25 mm) | 2 |
| 3. Remote controller holder | 1 |
| 4. Fixing screw for (3.5 × 16 mm (Back)) | 2 |
| 5. Battery (AAA) for remote controller | 2 |
| 6. Wireless remote controller | 1 |
| 7. felt tape (Used for left or left-rear piping) | 1 |

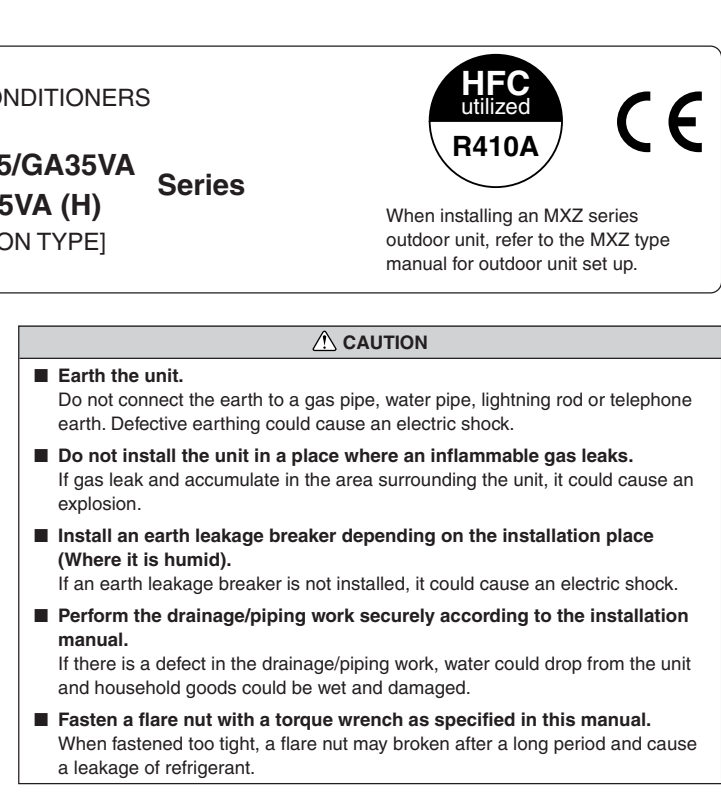
-Outdoor unit-

| | |
|--------------------------------|---|
| 1. Drain socket (VA type only) | 1 |
| 2. QUICK CLEAN KIT | 1 |

PARTS TO BE PROVIDED AT YOUR SITE

| | |
|--|--------|
| Optional extension pipe | |
| 1. Indoor/outdoor unit connecting wire (4-core 1.0 mm ²) | 1 |
| 2. Extension pipe | 1 |
| 3. Wall hole sleeve | 1 |
| 4. Wall hole cover | 1 |
| 5. Pipe long band (The quantity depends on the pipe length.) | 2 to 5 |
| 6. Fixing screw for (4 × 20 mm (The quantity depends on the pipe length.)) | 2 to 5 |
| 7. Piping tape | 1 |
| 8. Putty | 1 |
| 9. Drain hose (or soft PVC hose, 15 mm inner dia. or hard PVC pipe VP16) | 1 or 2 |
| 10. Refrigeration oil | 1 |
| Power supply cord (See the table in 5-1 INDOOR/OUTDOOR UNIT CONNECTING WIRE CONNECTION for the cord size.) | 1 |

Note:
 When operating the air conditioner in low outside temperature, be sure to follow the instructions described below.
 • Never install the outdoor unit in a place where its air inlet/outlet side may be exposed directly to wind.
 • To prevent exposure to wind, install the outdoor unit with its air inlet side facing the wall.
 • To prevent exposure to wind, it is recommended to install a buffer board on the air outlet side of the outdoor unit.



2. SELECTING THE INSTALLATION LOCATION

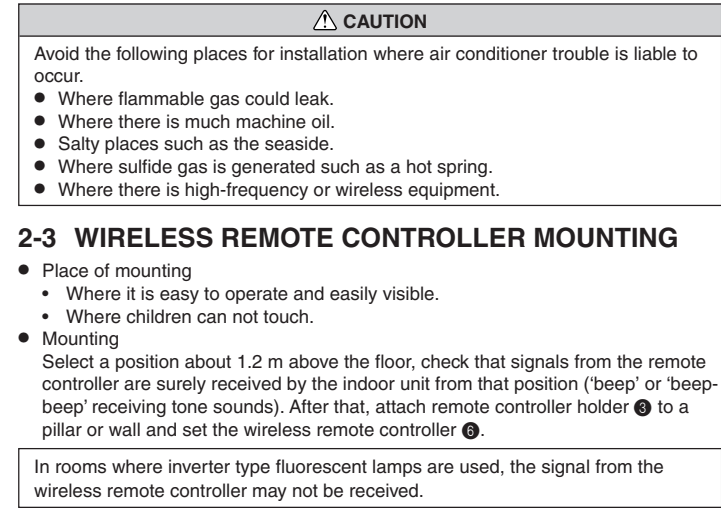
2-1 INDOOR UNIT

- Where airflow is not blocked.
- Where cool air spreads over the entire room.
- Maximum refrigerant piping length between indoor unit and outdoor unit is 20 m and the difference of height of both units is 12 m.
- Rigid wall without vibration.
- Where it is not exposed to direct sunshine.
- Where easily drained.
- At a distance 1 m or more away from your TV and radio. Operation of the air conditioner may interfere with radio or TV reception in areas where reception is weak. An amplifier may be required for the affected device.
- In a place as far away as possible from fluorescent and incandescent lights (so the infrared remote control can operate the air conditioner normally).
- Where the heater can be moved and replaced easily.

2-2 OUTDOOR UNIT

- Where it is not exposed to strong wind.
- Where airflow is good and dustless.
- Where it is not exposed to rain and direct sunshine.
- Where neighbours are not annoyed by operation sound or hot air.
- Where rigid wall or support is available to prevent the increase of operation sound or vibration.
- Where there is no risk of combustible gas leakage.
- When installing the unit at a high level, be sure to fix the unit legs.
- Where it is at least 3 m away from the antenna of TV set or radio. Operation of the air conditioner may interfere with radio or TV reception in areas where reception is weak. An amplifier may be required for the affected device.
- Please install it in an area not affected by snowfall or blowing snow. In areas with heavy snow, please install a canopy, a pedestal and/or some baffle boards.

Note:
 It is advisable to make a piping loop near outdoor unit so as to reduce vibration transmitted from there.



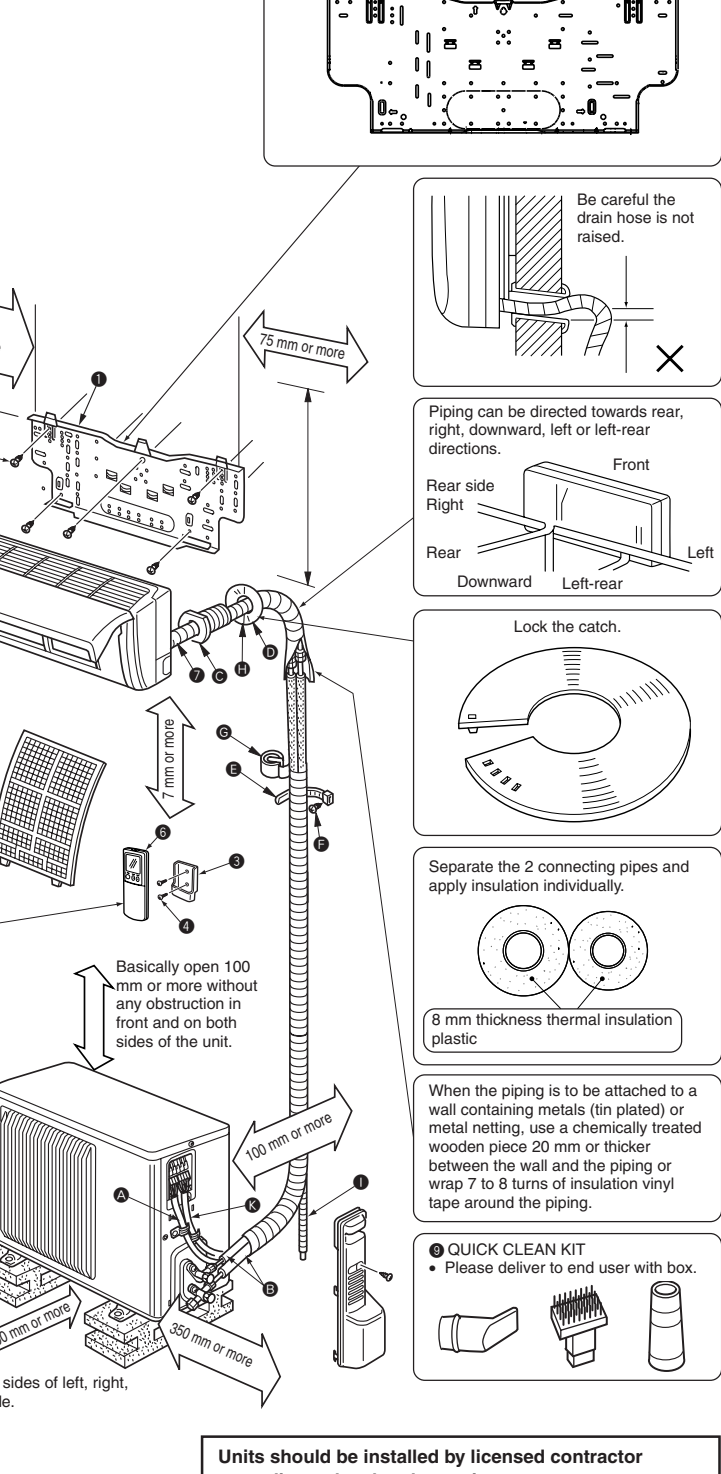
PIPING PREPARATION

Use the refrigerant pipes that meet the following specifications.

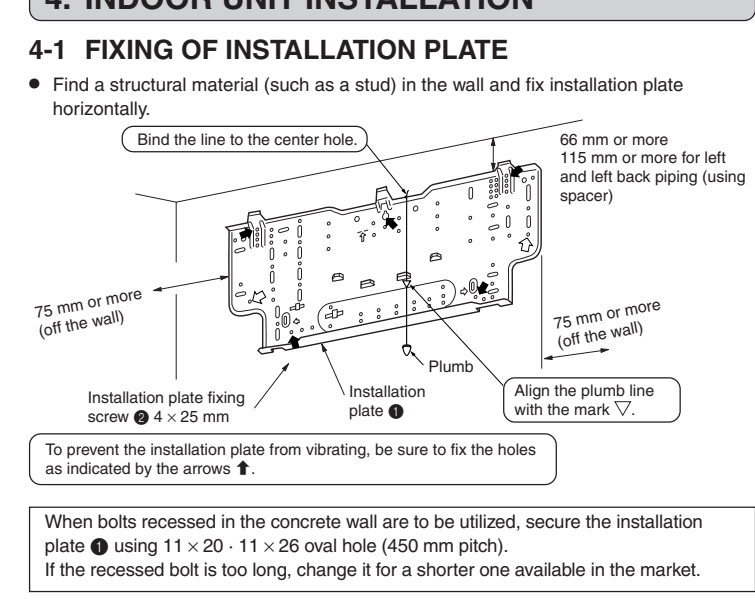
| Pipe | Outside diameter | Insulation thickness | Insulation material |
|------------|------------------|----------------------|--|
| For liquid | 6.35 | 8 | Heat resistant foam plastic 0.045 specific gravity |
| For gas | 9.52 | 8 | |

- Use a copper pipe or a copper-alloy seamless pipe with a thickness of 0.8 mm.
- Never use any pipe with a thickness less than 0.8 mm, as the pressure resistance is insufficient.
- Ensure that the 2 refrigerant pipes are insulated to prevent condensation.
- Refrigerant pipe bending radius must be 100 mm or more.

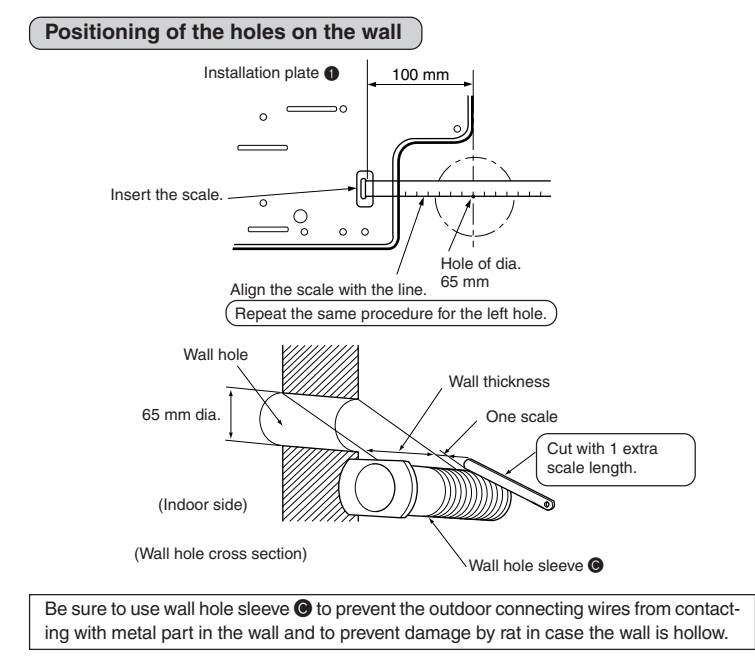
CAUTION
 Be sure to use the insulation of specified thickness. Excessive thickness may cause incorrect installation of the indoor unit and lack of thickness may cause dust dripage.



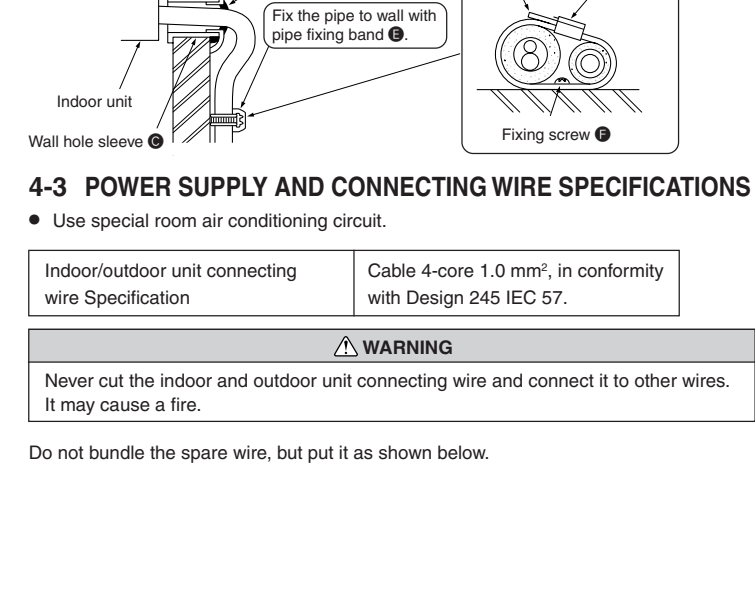
4. INDOOR UNIT INSTALLATION



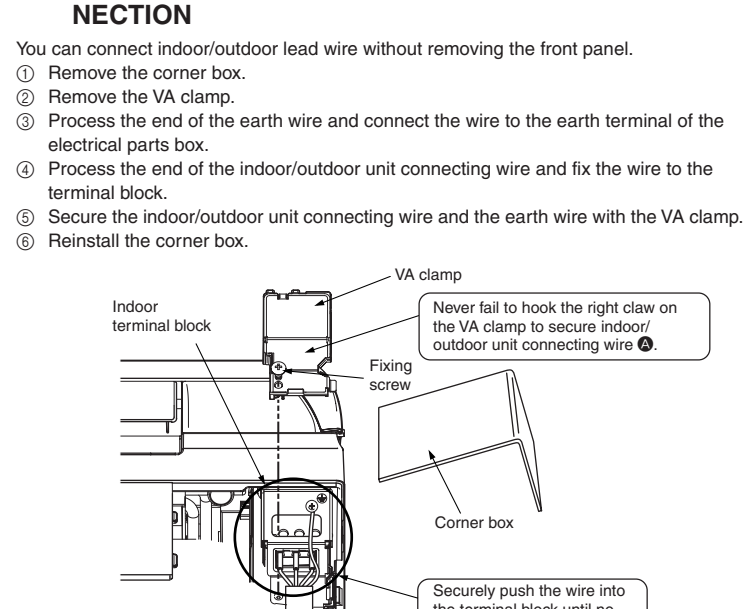
4-2 WALL HOLE DRILLING



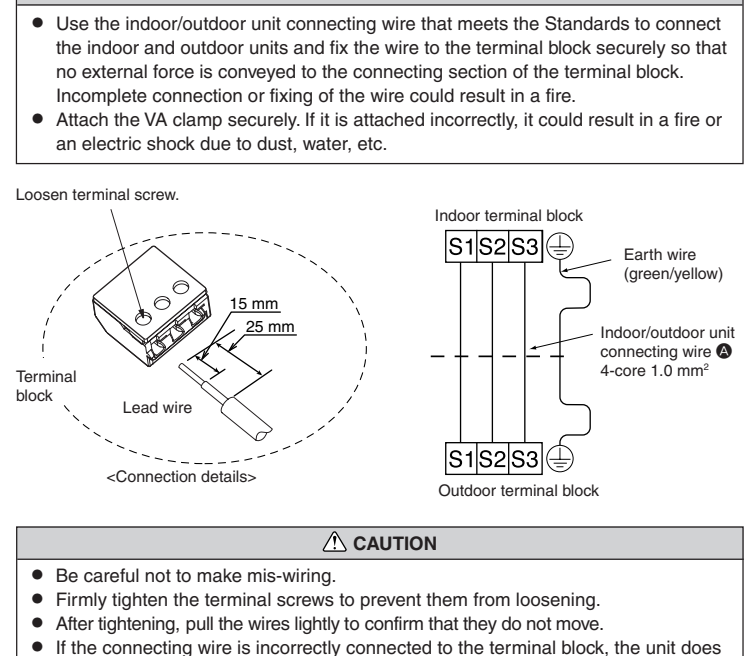
4-3 POWER SUPPLY AND CONNECTING WIRE SPECIFICATIONS



4-4 INDOOR AND OUTDOOR CONNECTING WIRE CONNECTION



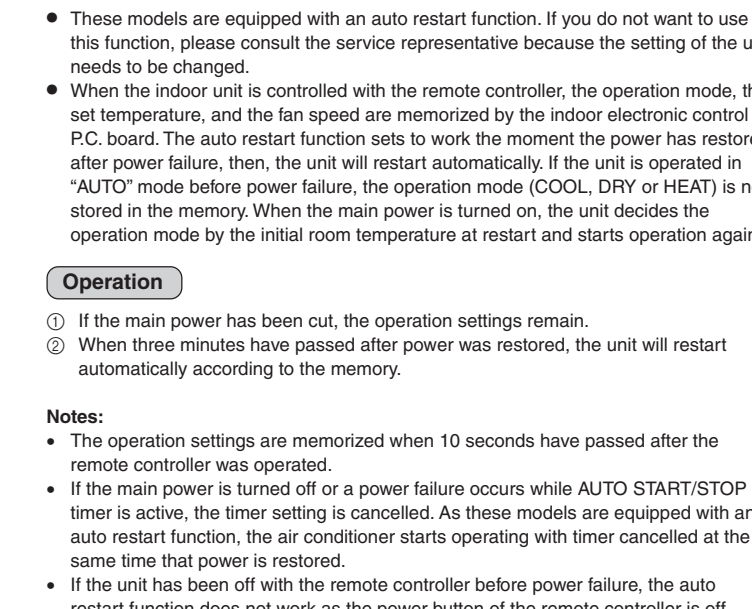
4-5 AUTO RESTART FUNCTION



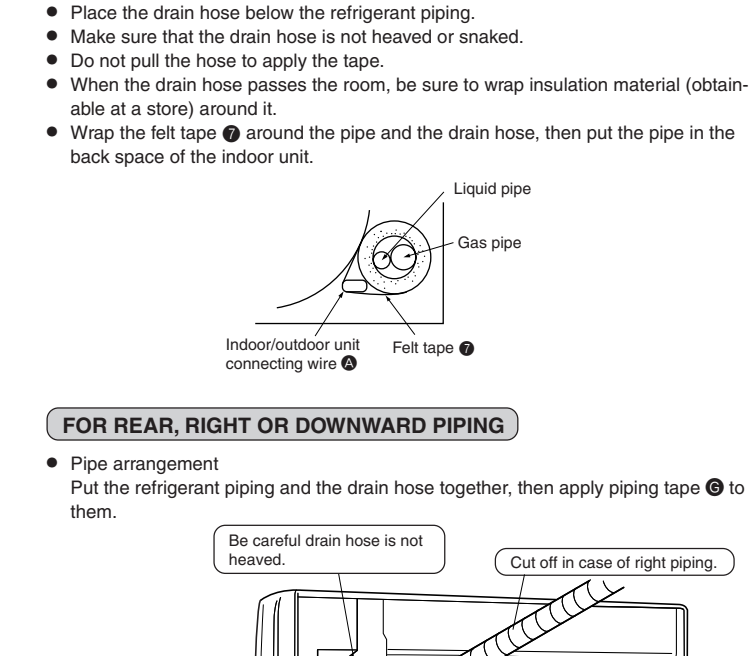
4-6 PIPE FORMING



FOR LEFT OR LEFT-REAR PIPING



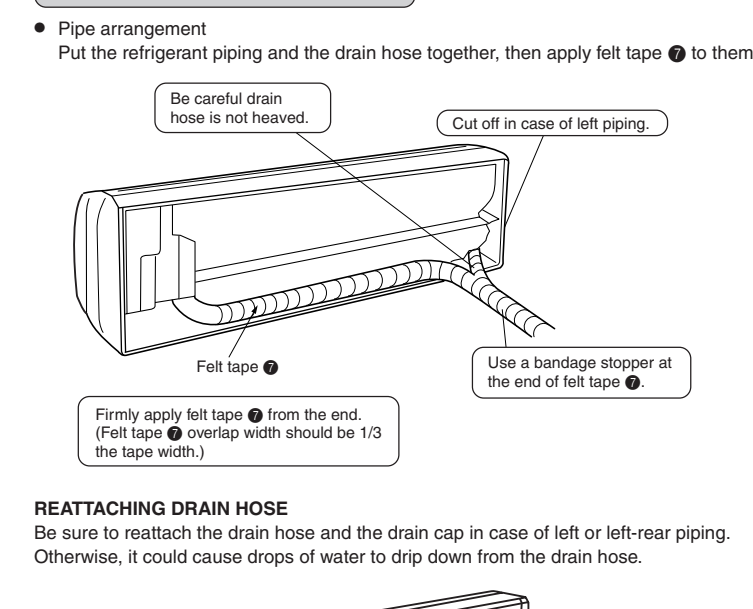
FOR REAR, RIGHT OR DOWNWARD PIPING



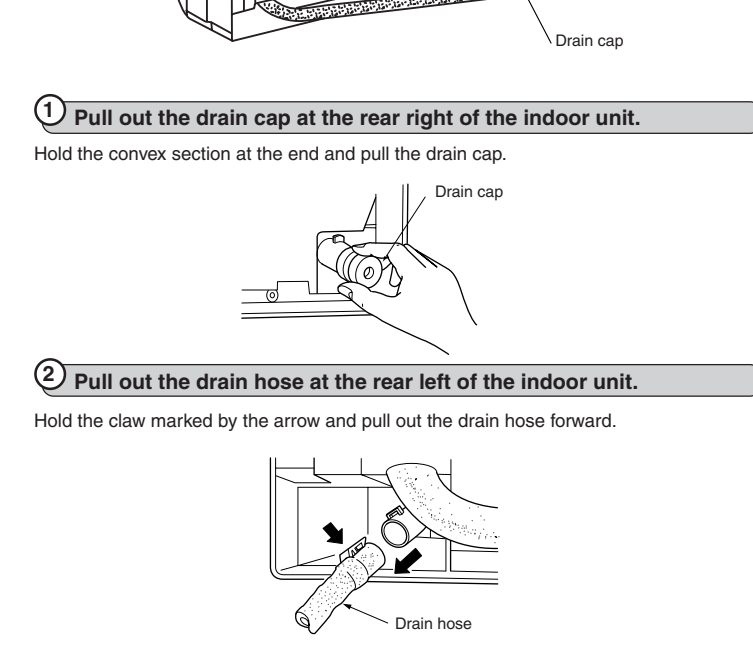
5. OUTDOOR UNIT INSTALLATION



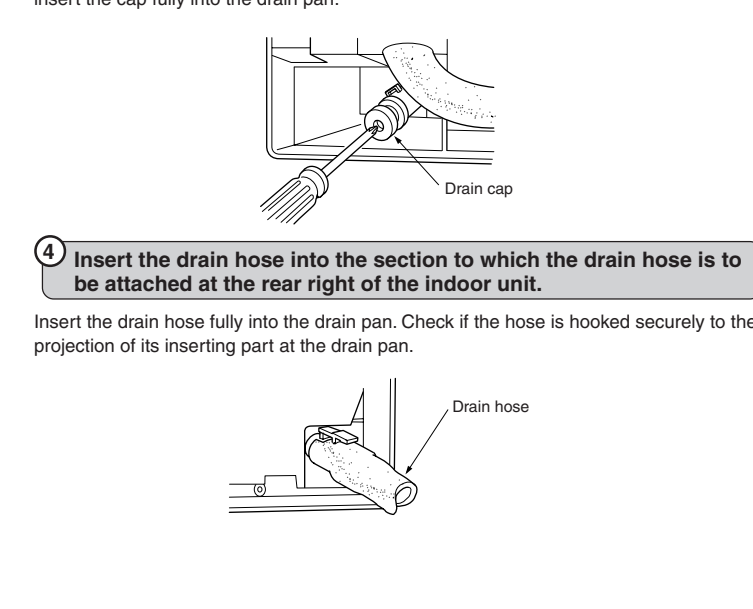
6-4 PURGING PROCEDURES-LEAK TEST



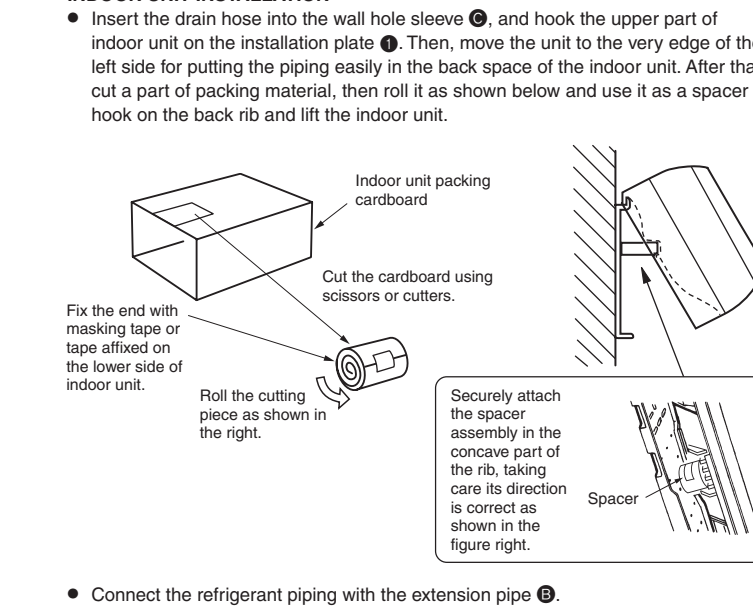
6-6 CHECKING AFTER INSTALLATION



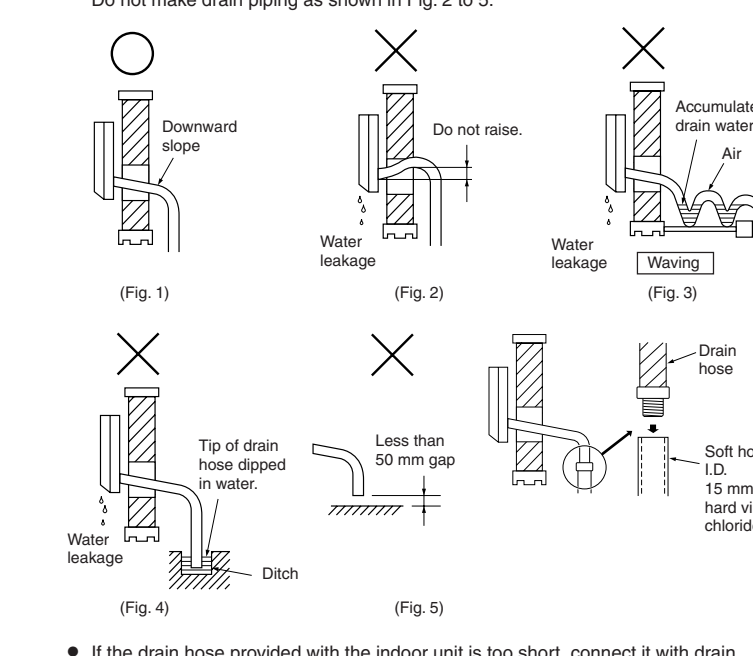
6-5 TEST RUN



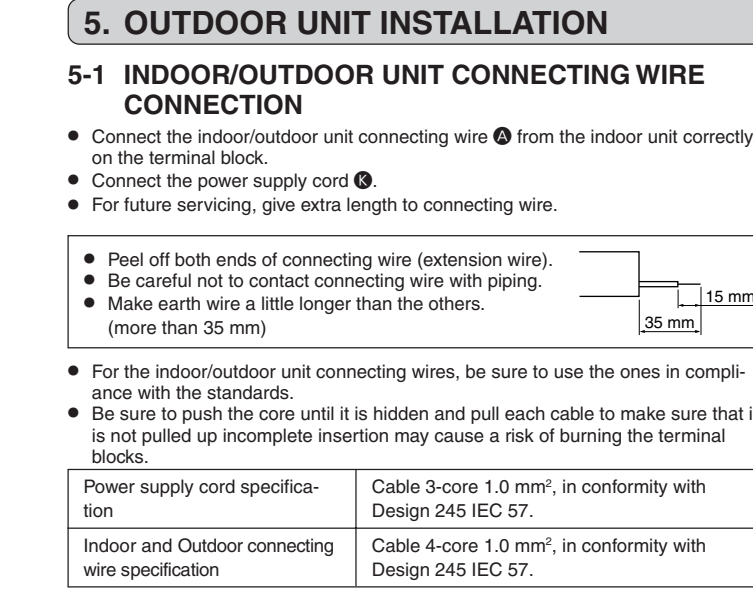
7. FOR MOVEMENT AND MAINTENANCE



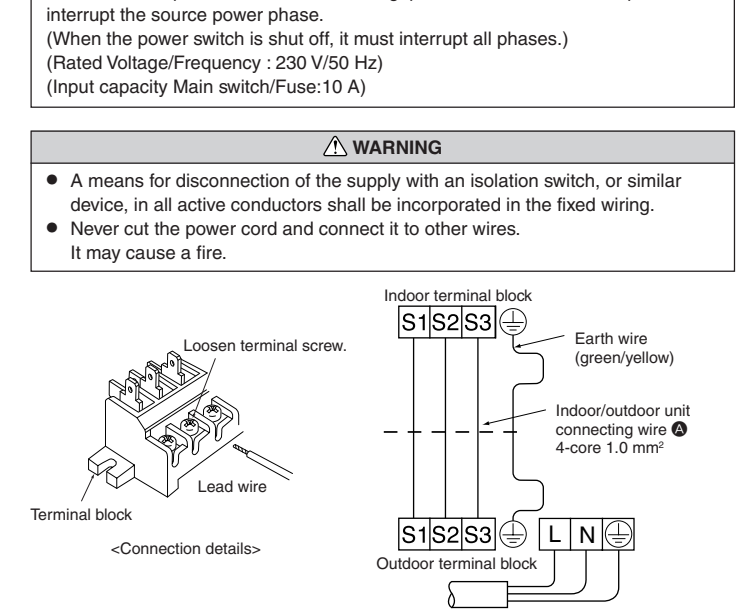
7-2 PUMPING DOWN



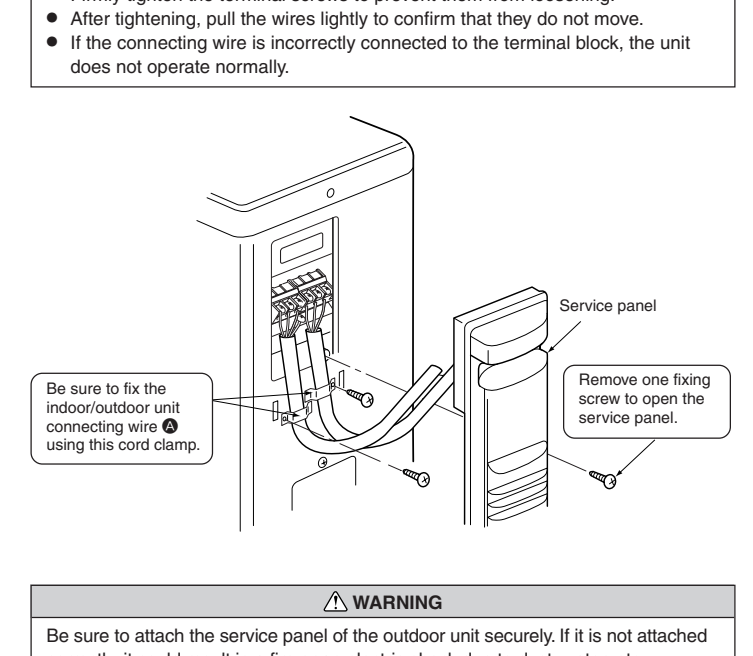
7-3 REMOVING THE INDOOR UNIT



5-2 DRAIN PIPING FOR OUTDOOR UNIT



5-1 INDOOR/OUTDOOR UNIT CONNECTING WIRE CONNECTION



6-2 EXPLANATION TO THE CUSTOMER

